## FROM

BY MARY J. HOLMES

CHAPTER XII .- (Continued.) ed by the loud rattling of wheels, and the halloo of many voices. Going to the the Widow Perkins came out in a trice of her. to see "if the Old Harry was to pay, or Soon after Mary went to Mount Holwhat." No sooner did Henry Lincoln get yoke she had received a letter from Billy, sight of Mary than springing to his feet, in which he expressed his pleasure that and swinging his arm around his head, he she was at school, but added that the screamed out: "Three cheers for the fact of her being there interfered great-

when at last the hay cart disapeared from view, and the noise and dust had somewhat substited. Then as she saw the teams in Mary's eyes she added, "Oh, I wouldn't are in the care of the control of the care of t "Wasn't that smart?" said Jenny, I wouldn't care if they did tease me about Billy Bender. I'd as lief be teased about him as not."

"It isn't that," said Mary, smiling in spite of herself, at Jenny's frankness. "It isn't that. I didn't like to hear Ella sing with your brother, when she must have known he meant to annoy me."

"That certainly was wrong," returned Jenny, "but Ella isn't so much to blame as Henry, who seems to have acquired a great influence over her during the few weeks he has been at home. You know she is easily flattered, and I dare say Henry has fully gratified her vanity in that respect, for he says she is the only decent looking girl in Chicopee. But see, there comes Mrs. Mason; I guess she wonders what is keeping you so long."

The moment Mrs. Mason entered the school room, Jenny commenced talking about Mount Holyoke, her tongue running so fast that it entirely prevented anyone else from speaking until she stopped for a moment to take breath. Then Mrs. Mason very quietly remarked that if Mary wished to go to Mount Holyoke she could do so, Mary looked up inquiringly, wondering what mine had opened so suddenly at her feet; but she received no explanation until Jenny had bidden her good-by and gone. Then she learned that Mrs. Mason had just received one hundred dollars from a man in Boston, who had years before owed it to her husband, and was unable to pay it sooner. "And now," said Mrs. Mason, "there is no reason why you should not go to Mount Holyoke, if you wish to."

exclaimed Rose Lincoln, as from the windows of the crowded vehicle in which they had come from the cars she first obtained a view of the not very handsome

village of South Hadley.

Rose was in the worst of humors, for by some mischance Mary was on the same seat with herself, and consequently she was very much distressed and crow ed. She, however, felt a little afraid of Aunt Martha, who she saw was inclined to favor the object of her wrath, so she restrained her fault-finding spirit until she arrived at South Hadley, where everything came in for a share of her dis-

"That the seminary!" said she contemptuously, as they drew up before the building. "Why, it isn't half as large or handsome as I supposed. Oh, horror! I

The furniture of the parlor was also very offensive to the young lady, and Miss Lyon came in to meet them she, too, was secretly styled "a prim, fussy, slippery-tongued old maid." Jenny, however, who always saw the bright side of everything, was completely charmed with the sweet smile and placid face. After some conversation between Miss Lyon and Aunt Martha it was decided er, as a matter of course, and that Mary should room with Ida. Rose had fully intended to room with Ida berself, and

And now in a few days life at Mount Holyoke commenced in earnest. Although perfectly healthy, Mary looked rather delicate, and it was for this reason, perhaps, that the sweeping and dusting of several rooms were assigned to her, as her portion of the labor. Ida and Rose fared much worse, and were greatly shocked when told that they both belonged to the wash circle!

"I declare," said Rose, "it's too bad. I'll walk home before I'll do it;" and she glanced at her white hands, to make sure dreadful soapsuds!

ment, which was dish-washing. "I'm glad I took a lesson at the poor house years ago," said she one day to

Rose, who snappishly replied: they'll think you the pauper instead of

"Pauper? Who's a pauper?" asked Lucy Downs, eager to hear so desirable

Ida Selden's large black eyes rested reprovingly upon Rose, who nodded to-ward Mary, and forthwith Miss Downs with the information, which was not long in reaching Mary's ears.

'Why, Mary, what's the matter?" asked Ids, when, toward the close of the day, she found her companion weeping in her room. Without lifting her head Mary replied, "It's foolish in me to cry, w, but why need I always be re proached with having been a pauper? I couldn't help it. I promised mother I "She would take care of little Allie as long as Mary. she lived, and if she went to the poor-house I had to go too."

taking Mary's hot hands between her

In a few words Mary related her history, omitting her acquaintance with door, she and Mary saw coming down George Moreland, and commencing at the the road at a furious rate the old hay cart, laden with young people from Chicopee, who had been berrying in Sturbut little whether one were rich or poor bridge and were now returning home in | if she liked them. From the first she had high glee. The horses were fantastically trimmed with ferns and evergreens, while several of the girls were ornamented in away her tears, she promised to love her, Conspicuous among the and to be to her as true and faithful a noisy group was Ella Campbell. Henry friend as Jenny. This promise, which Lincoln's broad-brimmed hat was rest-was never broken, was of great benefit to ing on her long curls, while her white sun-bonnet was tied under Henry's chin.

The moment Jenny appeared the whole party set up a shout so deafening that the wealthy Miss Selden seemed so fond

oolma'am and her handsome lover, ly with his plan of educating her him-ly! Hurrah!" self. "Mother's ill health," said he, "prevented me from doing anything until now, present I shall next week leave Mr. Sel-den's employment, and go into Mr. Wor-thington's law office as clerk, hoping that when the proper time arrives I shall not be defeated in another plan which was rormed in boyhood, and which has become the great object of my life."

Mary felt perplexed and troubled. Billy's letters of late had been more like those of a lover than a brother, and she could not help guessing the nature of "the plan formed in boyhood." She knew she should never love him except with a sister's love, and though she could not tell him so her next letter lacked the tone of affection with which she was accustomed to write, and was on the whole a rather formal affair. Billy, who readily perceived the change, attributed it to the right cause, and from that time his letters became far less cheerful than usual. Mary usually cried over them, wishing more than once that Billy would trans-fer his affection from herself to Jenny, and it was for this reason, perhaps, that without stopping to consider the propri-ety of the matter, she first asked Jenny to write to him, and then encouraged her in answering his notes, which became gradually longer and longer, until at last his letters were addressed to Jenny, while

the notes they contained were directed to Mary! CHAPTER XIII. Rapidly the days passed on at Mount Holyoke. Autumn faded into winter,

whose lcy breath floated for a time over the mountain tops, and then melted away at the approach of spring, which, with its swelling buds and early flowers, gave way in its turn to the long bright days of summer. And now only a few weeks remained ere the annual examination at which Ida was to be graduated. Neither Rose nor Jenny were to return

the next year, and nothing but Mr. Lin coln's firmness and good sense had pre mother first heard that they had failed to enter the middle class. Mrs. Lincoln's mortification was undoubtedly greatly increased from the fact that the despised Mary had entered in advance of he "Things are coming to a pret ty pass," said she. "Yes, a pretty pass but I might have known better than to send my children to such a school."

She insisted upon sending for Rose and Jenny, but Mr. Lincoln promptly replied that they should not come home Still, as Rose seemed discontented, com-plaining that so much exercise made her side and shoulder ache, and as Jenny did not wish to remain another year un less Mary did, he consented that they should leave school at the close of the term, on condition that they went some where else.

"I shall never make anything of Hen ry," said he, "but my daughters shall receive every advantage, and perhaps one or the other of them will comfort my old

He had spoken truly with regard to Henry, who was studying, or pretending to study, law in the same office with Billy Bender. But his father heard no favor this decision made her very angry; but there was no help for it, and she was time large bills were presented. So it is no wonder the disappointed father sighed, and turned to his daughters for the comfort his only son refused to give For the examination at Mount Holyoke great preparations were being gade. Rose, knowing she was not to r turn, seemed to think all further effort on her part unnecessary; and numerous were th reprimands, to say nothing of the black contrary, said she wished to retrieve her reputation for laziness, and leave behind a good impression. So, never before in her whole life had she behaved so well, or studied as hard as she did during the Jenny was delighted with her allot-nent, which was dish-washing.

yoke. Ida, who was expecting her fath-er, aunt and cousin to be present at the anniversary, was so engrossed with her studies that she did not observe how sad and low-spirited Mary seemed. She had tasted of knowledge and now thirsted for more; but it could not be; the

funds were exhausted, and she must leave the school, never perhaps to return again. "How much I shall miss my music, and how much I shall miss you," she said one day to Ida, who was giving her a lesson "It's too bad you haven't a piano," re-turned Ida, "you are so fond of it, and improve so fast!" Then after a moment, she added, "I have a pian to propose, and Next winter you must spend with me in the last time I was at home, and we even selected your room, which is next to

"Can't go!" repeated Ida. "Why not? ouse I had to go too."

Jenny will be in the city, and you are
"And who was little Allie?" asked Ida,
always happy where she is; besides, you

mine, and opposite to Aunt Martha's

Now, what does your ladyship say to it?

will have a rare chance for taking musilessons of our best teachers; and then, too, you will be in the same house with George, and that alone is worth going to Boston for, I think."

Ida little suspected that her last argument was the strongest objection to Mary's going, for, much as she wished to meet George again, she felt that she would not on any account go to his home, lest he should think she came on purpose to see him. There were other rea-sons, too, why she did not wish to go. Henry and Rose Lincoln would both be in the city, and she knew that neither of them would scruple to do or say anything which they thought would annot her. Mrs. Mason, too, missed her, and longed to have her at home; so she resisted all Ida's entreaties, and the next letter which went to Aunt Martha carried her refusal.

In a day or two Mary received two let-ters, one from Billy and one from Mrs. Mason, the latter of which contained money for the payment of her bills; but, on offering it to the principal, how was she surprised to learn that her bills had not only been regularly paid and receipted, but that ample funds were provided for the defraying of her expenses during the coming year. A faint sickness stole over Mary, for she instantly thought of Dills. But and the obligation she Billy Bender, and the obligation she would now be under to him forever. Then it occurred to her how impossible it was that he should have earned so much in so short a time; and as soon as she could trust her voice to speak, she asked who it was that had thus befriended her.

The preceptress was not at liberty to tell, and with a secret suspicion of Aunt Martha, Mary returned to her room to read the other letter, which was still unopened. Her head grew dizzy, and her spirits faint, as she read the passionate outpouring of a heart which had cherish ed her image for years, and which, though fearful of rejection, would still tell her how much she was beloved. "It is no sudden fancy," said he. Mary, I believed my affection for you returned, but now you are changed. Your letters are brief and cold, and when I look around for the cause I am led to fear that I was deceived in thinking you ever loved me. If I am mistaken, tell me so; but if I am not, if you can never be my wife, I will school myself to think of you as a brother would think of an only and darling sister."

For several days Mary had not been well, and the excitement produced by Billy's letter tended to increase her illness. During the hours in which she was alone that day she had ample time for reflection, and before night she wrote a letter to Billy, in which she told him how impossible it was for her to be the wife of one whom she had always loved as an own and dear brother. This letter caused Mary so much effort, and so many bitter tears, that for several days she contin worse, and at last gave up all hope of be ing present at the exam

"Oh, it's too bad?" said Ida, "for I do want you to see Cousin George, and I know he'll be disappointed, too, for I never saw anything like the interest he takes in you."

A few days afterward, as Mary was lying thinking of Billy, and wondering if she had done right in writing to him as she did, Jenny came rushing in, wild with delight.

Her father was downstairs, together with Ida's father, George and Aunt Mar-tha. "Most the first thing I did," said I guess Aunt Martha was shocked, for she looked so queer. George laughed, and Mr. Selden said he was doing well, and was one of the finest young men in

sionally with unkind remarks concerning Mary, who, she said, was undoubtedly in her classes where she knew she could soon as the examination is over she'll get

ompany at Chicopee." In this Rose was mistaken, for when the exercises closed Mary was still too ill to ride, and it was decided that she should remain a few days until Mrs. Mason could come for her. With many tears Ida and Jenny bade their young friend good-by, but Rose, when asked to go up and see her, turned away disdainfully amusing herself during their absence by talking and laughing with George More

The room in which Mary lay commanded a view of the yard and gateway; and after Aunt Martha, Ida and Jenny had left, she arose, and stealing to the winlow, looked out upon the company as Lincoln's shawl and satchel were thrown over his arm, while Rose herself walked close to his elbow, apparently engrossing his whole attention. Once he turned around, but fearful of being observed, Mary drew back behind the window cur-(To be continued.)

Zulus of the Railroads "Do you know what a Zulu is?" said n old railroad man. The traveling man who was waiting for his train smiled in a way that was meant to indicate ever existed; and told the railroad man

about the Africans, called Zulus, who

maintained that continent's reputation for fighting before the Boers stepped Little was doing in the railroad man's line just then, so he listened. "Well, they may be Zulus all right mough," he remarked, "but they are railroads. There is the kind that runs into these yards," and he pointed down string. the track, where a box car stood.

A stone pipe protruded through a hole in the door. The pipe was at an animals live as happily as the road's president who passes them in his private car.-Chicago Inter Ocean.

but never brought back by them.



Counting Out Rhyme There has been much conjecture as to the origin of children's "counting-out" rhymes. Many persons believe them

to be corruptions of what was once good English, that ed through much repetition by children who repeat what they hear, literally. This would seem the best solution of the matter, though

NOW, DON'T PERK." there are theorists who believe that this doggerel had its start in the folk-songs of a foreign people, who brought them to this country, where they became somewhat Americanized by phonetic repetition.

Some of these rhymes present a curious mixture of English and otherwise unheard-of words. The following are excellent examples of the latter class:

"ENI, MENI, MINI, MO"

Onery, oery, ickery, ann fillison, follison, Nicholas, Queevy, Quavy, English navy, Stinklum, Stanklum Buck.

Illery, Nillery, Mexican navy, Whisky drinker, American time, Humbledy, bumbledy, ninety-nine. Others contain no English words at

Crack a feni, ni, fo, Ommanuga, poppatuga, Rick, hick, hando. A curious hodge-podge, evidently of Scotch origin from its allusion to "Go

wan Gorse," is as follows: Out in the manor of Gowan Gorse He can trip and he can trot And he can play in the mustard pot. Aye oh, who's below?

A winding horse is a new manner of animal, but his accomplishments seem During the whole of George's stay at to be many. Many other rhymes have Mount Holyoke Rose managed to keep him at her side, entertaining him occa-English. Perhaps they are not sufficiently hackneyed or of great enough antiquity to be corrupted, or is it possible that American children are beherself no credit; "but," said she, "as coming a more distinctly speaking

class? Examples of these are: One, two, three, four, Eating pie off a plate.

One, two, three, four, five, six, seven, Chicago Record-Herald.

"Do animals ever shed tears?" is

question frequently asked, but never satisfactorily answered. Henry Harland tells of a cow that wept freely when separated from her calf. In one of the large buildings of the city the they departed. She could readily divine other day many people were witnesse which was George Moreland, for Rose of a weeping kitten. The wee mite has was George Moreland, for Rose of a weeping kitten. The wee mite had strayed into the building and there had encountered a fierce, barking dog of the fox terrier variety. She had run to escape him into a room in which was the roar of much machinery, had been shouted at, had had a piece of coal thrown at her, had been caught by the nape of her neck and flung to a giant, ad been taken up in an elevator and had had the tip of her tail pinched by some laughing men.

When she finally reached her destina tion, a quiet spot at the top of the tall he knew all the species of Zulus that building, she was a palpitating mass of fur more dead than alive, with no fight left in her and with tears streaming from her eyes. Indeed, a more lachry mose sight was never seen.

It took a good fifteen minutes of petting and cajolery to induce her to stop crying, too, and to lift her head. Bu finally, like the cow in the story, she became consoled. Then she washed her not the sort of Zulus that travel on face and forgot her troubles in frivolous pursuit of a piece of paper tied to a

Water is found everywhere, especialangle of about 35 degrees. A cloud ly when it rains, as it did the other day, of smoke was coming from it. Four when our cellar was half full. Jane blooded horses and a man were the oc- had to wear her father's rubber boots cupants of that. The man was the to get the onions for dinner. Onions Zulu, Taking care of valuable stock make your eyes water, and so does en route from one market to another horseradish, when you eat too much was his business. He was a type of a There is a good many kinds of water class that railroad men on every line in the world—rain-water, soda-water, haev named the Zulus. They fit up the holy-water and brine. Water is used center of the cars for a sort of living for a good many things. Sailors use it room, and there in the midst of their to go to sea on. If there wasn't any ocean the ships couldn't float and they would have to stay ashore. Water is a good thing to fire at boys with a squirt Caution is often tossed to the winds. and to catch fish in. My father caught a big one the other day, and when he

hauled it up it was an eel! Nobedy could be saved from drowning if there wasn't any water to pull them out of Water is first-rate to put fires out with. I love to go to fires and see the men work at the engines. This is all I can think of about water-except the flood. -Industrial School Gem.

A Fellow's Mother.

"A fellow's mother," said Fred the wise,
With his rosy cheeks and his merry blue "Knows what to do if a fellow gets hurt By a thump, or a bruise, or a fall in the

'A fellow's mother has bags and strings Hooks and buttons, and lots of things; No matter how busy she is, she'll stop To see how well you can spin your top.

"She does not care not much, I mean. If a fellow's face is not quite clean; And if your trousers are torn at the knee, She can put in a patch that you'd never

'A fellow's mother is never mad. And only sorry if you're bad; And I'll tell you this: if you're only true, She'll always forgive you, whate'er you

"I'm sure of this," said Fred the wise, With a manly look in his laughing eyes: "I'll mind my mother every day; A fellow's a baby that won't obey."

—Apples of Gold.

Practical Demonstration. Teacher-Tommy, what are you doing

Tommy-Nothing. He wanted to know if you take three from five how setting in. This may in part account many will remain, and I took three of his apples to show him, and now he wants them back.

Teacher-Well, why don't you give hem back to him? Tommy-'Cause then he would forget low many are left.

Doing Sums on the Ground. Little 6-year-old Harry, while reading a chapter of Genesis, paused and isked his mother if people in those days used to do sums on the ground. He had been reading the passage which says: "And the sons of men multiplied upon the face of the earth,'

An Eleventh Commandment. Teacher-How many commandmen are there? Small Boy-'Leven. Teacher-Eleven! What is the elev

Small Boy-Keep off the grass. Description of an Elephant. "Oh, mamma!" exclaimed little Edith on her return from the show, "I saw an elephant and he walks backwards

and eats with his tall!" Stone Forest. A remarkable forest of petrified trees called Chalcedony Park can be reached in a few hours from Holbrook, Ariz. The area of the park is estimated at hundreds of square miles, and it contains thousands of tons of agatized wood. It is like a vast lumber camp, where the lumbermen have thrown huge logs at random from their sleds, and moss-grown. Some of the trunks are 150 feet long, and they break up in

sections, as if sawed through at inter-

vals.

The bark is of a dark red color, as a rule, but the chips and interior exhibit kaleidoscopic colors. Amethysts, red and yellow jasper, chalcelony of every tint, topaz, onyx, carnelian and other stones abound. The logs, in fact, are a blend of these stones. One of them. 100 feet long and three to five feet in diameter, spans a narrow canyon, and is called the Agate Bridge. It is chiefly composed of jaspers and agates. As to the origin of the petrifications it is supposed that in past times the trees were overwhelmed with volcanic ashes and hot silicious waters from geysers. The timber is analogous to ine or cedar, and as it decayed the silica dyed with various salts of iron and manganese in solution took its place.

Two New Bridges for Venice. It is proposed to erect two great bridges in Venice—one to connect the Island of San Michele, which is the sole cemetery of Venice, with the city on the north, and one to connect the Island of the Guidecca with the city on the south. The former is an easy affair, as the water, though a quarter of a mile broad, is shallow. The other is a serious and difficult matter, as the Guidecca canal is really an arm of the sea, and the distance at its narrowest part is over an eighth of a mile. The Guidecca canal is also the highway for hauled five shocks at once on it. It all the ships of any size, as it is by it is very handy in winter when feeding alone they can reach the docks, which when the ground is frozen to whee are at the railway station. But the fodder or straw on.-G. D. Work, in Guidecca Island is becoming of import- Ohio Farmer. ance as the manufacturing quarter of the city. One of the largest flour mills in Europe is there. It belongs to Sigsubscribe toward the expense of the make two pounds of gain on the steer. £16,000. Other manufacturers on the mined upon.-Edinburgh Scotsman.

Thirteen at Table. Mrs. B .- Oh, Charles, we can never sit down with thirteen at table. Mr. B.-Pshaw! I hope you're not so superstitious as that. Mrs. B .- No, of course not; but we

have only twelve dinner plates.—Philadelphia Bulletin. A Large Shingle Mill. mill building ever erected. It is nearly

completed and is 770 feet long, with two wings of 830 feet, all of an aver ago width of 100 feet, and five stories in height, including basement. Out of the frying-pan of courtship



We have often seen the advice of the agricultural columns feed the horse before watering him, but we never had good success in convincing one when he came in from a drive or a day's work that he should wait for a drink until after he had eaten. We never tried very hard because we thought he knew better than the writers of such paragraphs whether he was more thirsty than hungry or not, and we know that while a glass of water tasted good before a meal we did not care for it after we were through eating unless the food was too salt. Now we have a report of an English experiment in which one horse was given four quarts of oats, and then allowed to drink. Soon after he was killed, and scarcely one quart of the oats was found floating in the water in the stomach, while three quarts had been washed into the intestines, entirely undigested. Another horse was watered before giving him the oats, and killed after the same lapse of time. All the oats were found in the stomach. and the work of digestion was already for the fact we have long known, and sometimes alluded to, that the grain for a working or fattening animal seems to do much more good when the larger part of it is given at the night feeding. When we fed grain to our milch cows in summer we gave it only at night, and we thought it better, because they digested it better while at rest; but it may have been so for no other reason than that we watered before feeding at night and after feeding in the morning. When the hay or cut corn fodder was wet a little and the ground grain mixed with it, as in winter, probably it made less difference.-American Cul-

Lumpy Jaw. The malady commonly known as germ, writes a stockman. It makes its growth on weeds and grass of low land, taking the form of mildew, which grows up in spores filled with numberless seeds. These are taken into the animal's mouth with grass and food and there commence their deadly work. Animals are most readily infected with these germs when cutting their teeth, the fungi getting into the inflamed tissue and thence into the blood. They start an abscess, not necessarily in the jaw, but generally there. Pus forms and discharges, drops on the grass or food eaten by others of the herd and, being full of germs, spreads the disease from one to another. After the pasture has been affected with ed for two or three years. These germs can be killed in the animal's body by a careful treatment of 11/2 drams of lodide of potash for a 1,000 pound animal, once a day for four days, then twice a day for four days and then once a day for four days. Rest one week, and then repeat treatment. Keep the animal in the barn all the time, and give lodide of potash in the drinking water. The above remedy will exterminate the disease, but if the jawbone has become honeycombed and the teeth loose in the tax it will not take away the lump. All cattle having the disease should be kept apart from the rest of the herd. and the milk from such cows should not be used.

Handy Husking Horse. In talking about a husking horse, why not make one right? Take the wheels off the corn plow and have an axle of gas pipe the length desired; then take two pieces 10 feet long, 1x3, for sides, made like a wheelbarrow Then put uprights 4 feet high in a slant over the wheels. You can husk on one end and pile the fodder on the



other end. I use it for carting fodder from one shock to the other. I have

The same feed which is required for nor Stucchi, and he has promised to producing one pound of butter will bridge 400,000 francs, equal to about The Minnesota Experiment Station found that 100 pounds of grain mixture island will probably also offer liberal with an equal amount of hay and roots donations should the work be deter fed to four steers produced 24.19 pounds of gain, and an equal amount of same food fed to four cows produced 12.04 pounds of butter. The type is not of so much significance with the steer as with the dairy cow, for the reason that a steer not of good type may be a large feeder and a good digester and convert all the food taken over his own maintenance into gain. while a cow not of the dairy type has the alternative of converting food Manchester, N. H., is to have what either into milk or gain, and she may It is claimed will be the largest shingle choose the latter when the owner. The meaning of this is that we have wants on'y the former.

Don't Clip the Wings least, a cruel practice and often results in the loss or injury of our most valu- creasing every year. American fruit able fowls is the sensible conclusion of has a known worth from St. Petersburg man steps into the fire of matrimony. | a poultry writer in Home and Farm. | to Liverpool.

The temptation to go to the highest portion of the roost is too strongly inored in the fowls to resist and they will invariably manage to get to the top. Then, in their baste to get down they fall, head over heels, having no means of protection. I have seen fowls attempt to fly from a perch fully ten feet from the ground, invariably with the

same results. The fence can always be built high enough to keep them in the yard and, aside from all injury the clipping does, their beauty is so marred that one should refrain from such unnecessary mutilation. A fence four feet high will keep the Leghorns at bome. The wost of wire is so moderate that every one may easily provide a good fence for the yards without resorting to any cutting of wings.

The Pea Louse. The new pest, the destructive peaaphis, has in the last two years inflicted enormous losses in various regions



where peas are grown for-canneries, as Maryland, Delaware, New Jer-

sey, New York and Connecticut, Mich-THE PEA LOUSE. igan and Wisconsin also have suffered from it. Some of the scientists claim that it is naturally more an enemy of clover than of peas. An encouraging feature noted in Canada is that wherever the aphis occurred it was attacked by parasitic enemies, the most vigorous of these being the small orange larvae of a species of diplosis-minute maggots-which suck the juice out of the body of the aphls. The "brush and cultivator" method of fighting the pea louse is accepted as the most generally effective. For this it is necessary that the peas be planted in rows, and when the insects are noticed the vines are brushed backward and forward with a good pine switch in front of a cultivator drawn by a single horse. In this manner the plant lice are covered up as soon as they fall to the ground, and a large proportion of them are destroyed. Peas sown late or on poor ground sustain most damage. The pea aphis is shown in the sketch many times en-

Molasses from Melons, D. Hanz, a farmer of Georgia, has discovered a new source of molasses lumpy jaw is caused by a fungous in the Georgia melon patch. According to his experiments and calculations, 270 melons will make thirty gallons of syrup worth \$15. The melons for mar-ket would be worth \$5 or \$6. This is important, if true, and it may be true. The value of melon molasses must depend on its quality. It may be practically worthless. If the sweet of the melon can be granulated to produce sugar, melon sugar may be worth attention, but the sweet of melon juice is so diluted that it is not likely to compete with the sugar beet. The sources of sugar are many. In the North the sugar maple is an unfailing source, although greately neglected. If the waste lands on every farm were planted with sugar maples, or even seeded, and kept these germs it should be plowed and free from cattle, in due time the owner would have good timber trees and a never-failing source of revenue in maple sugar. The price of that article is high enough to warrant farmers in setting maple groves.-Twentleth Cen-

> The Weeder A writer in the Practical Farmer says that one of the best farmers in Minnesota recently declared at his home institute that the weeder had been worth \$1,000 to him during the last ten years. It had enabled him to take better care of his crops, at less expense for labor. He told how he and the hired man would run the cultivators in corn and potatoes after a rain had packed the ground, and after three or four hours one of the boys would follow after with a weeder and his pony, and at night it made the father almost ashamed-the boy had done so much more good than he had. All who have used weeders have only good to say of them. They will do the best work on mellow, clean land. Rubbish on the surface and stones would interfere with their use. Do not be in a hurry to get into the field when it is wet with dew or rain. Wait until the ground is dry, and then you can cultivate and hoe fifteen or twenty acres per day. All weeds can be kept in check by beginning early and going over the ground every four or five days.

A Perfect Pedigree. If we were to buy an animal for breeding purposes we should insist upon a perfect pedigree or should refuse to pay any fancy price. But what constitutes a perfect pedigree? It is not a long line of descent from some famous animal, nor yet one in which we can trace several crosses of his blood. but we think it is one in which we can find no ancestor of a grade lower than what we are seeking to establish or perpetuate. Each and every one should he as good or better than its predecessor, and the stock should show indications of improving in each generation. With such a pedigree the increase would never go back if the proper care was given, but would produce better results all of the time.-New England

That the apple crop is actually worth more in cash annually than the wheat crop is a fact. The entire apple crop for 1900 was 215,000,000 barrels. These, at \$2 per barrel, would mean \$430,-000,000. The wheat crop does not average in value much over \$300,000,000. got the world's market for our fruit and are exporting nearly 4,000,000 barrels per year. These bring in the European markets nearer \$4 a barrel than \$2. And still the export trade is in